1. (Amended)

A chip resistor being symmetrical to allow for direct loading to a pick-and-place machine 1. without concern for top-bottom orientation, comprising:

a substrate having opposite parallel symmetrical top and bottom surfaces, and a central

longitudinal plane of symmetry;

separate and spaced first and second resistive layers on the top and bottom surfaces, respectively, electrically connected in parallel to each other; and

the top and bottom surfaces of the substrate being symmetrically located with respect to and equidistant from the central longitudinal plane so that when electrical current passes through the resistive layers, a temperature distribution within the substrate will be substantially symmetrical about the central longitudinal plane of the substrate for eliminating thermal bending thereof;

wherein an area of the first resistive layer is substantially equal to an area of the second resistive layer such that the chip resistor with both resistive layers tolerates higher instantaneous pulsed power than either layer could provide separately and individually; and first and second terminals for surface mounting, each terminal being electrically connected to the first and second resistive layers, the terminals being substantially symmetrical about the central longitudinal plane.

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